

REMARKS

Entry of the foregoing and reexamination and reconsideration of the subject application, as amended, pursuant to and consistent with 37 C.F.R. § 1.112, are respectfully requested in light of the following remarks.

STATUS OF CLAIMS

By the foregoing amendment, Claims 16, 18-25, 28-36, 43-54, 59-60 and 71-75 have been cancelled, without prejudice or disclaimer. Claims 13-15, 17, 26-27, 37-42, 55-58 and 61-70 remain in the application. Claims 13, 17, 37-40, 42 and 63-66 have been amended. Support for the amendments in the originally filed specification will be discussed later in this response. No new matter has been added.

INFORMATION DISCLOSURE STATEMENT

Applicants thank the Examiner for considering their Information Disclosure Statement and returning a fully initialed copy of the Form PTO-1449.

CLAIM FOR FOREIGN PRIORITY AND CERTIFIED COPY

It is requested that the claim for foreign priority and the copy of the certified copy of FR 02/03769 received from the International Bureau in this national phase application be acknowledged. It is noted that the wrong priority application number is listed on the U.S. official filing receipt; the correct number is FR 02/03769, as indicated on the face of WO 03/08710 A1 (the published version of the international application) and in the inventors' declaration. The undersigned has viewed the copy of the certified copy in PAIRS and confirmed that it is indeed a certified copy of FR 02/03769. A separate Request for Corrected Filing Receipt is filed herewith.

CLAIM OBJECTIONS

All of the claims have been objected to because the previous language of Claim 1 was purportedly easily misunderstood. The Examiner has suggested language to overcome this problem and applicants have adopted exactly the phraseology suggested by the Examiner in Claim 13. Thus, all of the claims now in this application are free of the record objection.

CLAIM REJECTIONS - 35 U.S.C. §112, FIRST PARAGRAPH

Claims 13-70 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite in the following respects:

First, the definition of Y has been criticized. As suggested by the Examiner, applicants have inserted the limitations of Claim 16 into Claim 13. Claims 16, 20-21, 24-25, 28, 31-32, 35-36, 43-46, 51-54 and 59 have therefore been cancelled as redundant.

Secondly, Claim 13 has been criticized as problematic because A can represent methylene, therefore the three specific embodiments are unclear. These embodiments are indeed meant to represent all permutations of a suitable catalyst, and methylene has accordingly been deleted as a meaning for A. This is believed to overcome the issue with respect to A.

With respect to the nonbasic inert filler, the catalyst can be supported on the basic filler or both ingredients can be added within the reaction medium. Thus, both scenarios must be considered.

Claims 18, 47 and 60 have been further rejected because the endgroups are said to be undefined. These claims and their dependent claims have been cancelled, obviating this portion of the §112 rejection.

Claims 37-54 have been further rejected because there does not appear to be appropriate antecedent basis in Claim 13 for the catalyst being supported on the inert filler. As already indicated, Claim 13 was not intended to be so limited. Therefore, Claim 37 has been amended to first specify that the catalyst is supported on the nonbasic inert filler. Therefore, Claim 37 and its dependent Claims 38-42 are free of this rejection. Claims 43-54 have been cancelled and thus their rejection based on this issue is obviated.

Claims 63-66, 69 and 70 have been further rejected because the process by which the radicals Y_1 are grafted onto the radicals Y is purportedly ill-defined. The second, broader meaning set forth by the Examiner is correct and supported by page 17, lines 5-14 of the specification. Accordingly, Claims 63-66 have been amended to recite that the groups are grafted on by hydrosilylation and to thus overcome this rejection. Claims 69 and 70 are free of this rejection in light of the amendment to Claims 63 and 65.

CLAIM ANALYSIS

The Examiner thinks that applicants should fully define the POS resin in Claim 13. Applicants submit that this is unnecessary. The POS resin will contain the units which are not present in the defined POSf compound but are present in the defined functionalized products. However, as the units present in the POSf compound can vary and the units present in the product can vary, it is believed that it would be inappropriate to also insert a definition of the POS resin.

CLAIM REJECTIONS - 35 U.S.C. § 103

Claims 13-66 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Rubinsztajn et al. U.S. Patent No. 5,510,430 in view of Bordone et

al. WO 01/44349 (translated as U.S. Patent No. 6,737,495). Applicants submit that all of the claims now in the application are free of this rejection.

Bordone et al. describe a process for preparing linear functionalized polyorganosiloxanes starting from D4 (methylcyclsiloxane) and M2 (hexamethyldisiloxane). As is noticed by the Examiner, Bordone et al. do not described reactants containing Q units. Although this seems to be simple on paper, the presence of Q units dramatically changes the chemistry of such reactants.

Indeed, the three-dimensional structure of a resin is by no means comparable to a "simple" silicone oil (having only M D and a small amount of T units). For example, a resin having Q units is solid and has to be dissolved in a solvent (xylene in the present examples) whereas a silicone oil having M and D units is a liquid (or a viscous liquid). The reactivity of such reactants are not comparable to each other.

Therefore, applicants submit that the reactants herein are so different from those of the prior art that one of ordinary skill would not expect the same catalyst to be useful here.

With respect to Rubinsztajn et al., a full discussion of this reference is found beginning at page 3, line 17 of the instant specification. Rubinsztajn et al. U.S. Patent No. 5,510,430 concerns the functionalization of resins of the MQ type with a whole range of functional groups, for example aryl, alkyl, vinyl or Si-H. The functionalization process used is based on the redistribution of disiloxanes and chlorosilanes. The examples more specifically disclose the redistribution of MQ resins of formula: $[(CH_3)SiO_{1/2}]_{0-65}[SiO_{4/2}]$, dissolved in toluene, by placing in contact with tetramethyldisiloxane and an acid catalyst that may be a phosphonitrile chloride, a linear phosphazene or triflic acid (example 6). This is therefore a redistribution MQ

+ M₂ at the reflux temperature of the solvent, with quenching of the reaction by using methanol, resulting in precipitation. Filtration and washing steps are then performed.

Thus, Rubinsztajn et al. do not describe the redistribution of MQ resins using functional oligo-organosiloxanes or functional polyorganosiloxanes, in the presence of triflic acid and do not make reference to use of any co-catalyst, and in any case do not at all mention the use of an inert filler such as carbon black in combination with triflic acid.

The rejection of Claim 15 is not understood. If Claim 15 limits a permutation of Claim 14 which does not represent the Examiner's foundation for rejection, applicants submit that rejection of Claim 15 is in error and inconsistent with the Examiner's position. Further, Claim 15 is patentable for the same reasons expressed above in the discussion of Bordone et al. and Rubinsztajn et al.

With respect to Claims 63-66, while hydrosilylation reactions are well-known, they are not known coupled with the process of Claim 13. And the process of Claim 13 is very different from that of the cited Bordone et al. and Rubinsztajn et al. because of the nature of the materials used.

In view of the foregoing, it is submitted that all of the claims are patentable over the combination of Bordone et al. and Rubinsztajn et al. Withdrawal of the rejection is believed to be in order and earnestly solicited.

Claims 13-66 have also been rejected under 35 U.S.C. §103(a) as being unpatentable over Kobayashi et al. U.S. Patent No. 5,527,873 in view of Bordone et al. WO 01/44349. Applicants believe that all claims now in this application are free of this rejection.

Kobayashi et al. do not describe the redistribution of MQ resins using functional oligo-organosiloxanes or functional polyorganosiloxanes, in the presence of triflic acid and do not make reference to the use of any co-catalyst, and do not mention at all use of an inert filler such as carbon black in combination with triflic acid. Bordone et al. do not supply what is missing in Kobayashi et al. Indeed, as evident from the discussion of Bordone et al., which describes a process for preparing linear functionalized polyorganosiloxanes starting from D4 and M2, the reactants are so different therein from those of the present invention that the teachings of the reference are irrelevant to the present invention. Withdrawal of the rejection is believed to be in order and earnestly solicited.

CLAIM REJECTIONS- 35 U.S.C. §102

Claims 71-75 have been rejected under 35 U.S.C. §102(b) as being anticipated by Bordone et al. WO 01/44349. Claims 71-75 have been cancelled, obviating this rejection.

DOUBLE PATENTING

Claims 13, 16-18, 20, 26, 28-29, 31, 37, 41, 43, 45, 55, 58, 61-64 and 67 have been provisionally rejected on the ground of nonstatutory double patenting over Claims 12-34 of copending Appln. No. 10/509,071. The scope of the claims in neither this nor the copending application has yet been settled, so it would be premature at this time to file a terminal disclaimer. It is respectfully requested that the Examiner hold this provisional rejection in abeyance until the scope of the claims to otherwise allowable subject matter has been determined.

OTHER MATTERS

With respect to Dittrich et al. U.S. Patent No. 5,919,883, it is submitted that this is even less relevant than references already discussed above. Dittrich et al., like Kobayashi et al., do not describe the redistribution of MQ resins using functional oligo-organosiloxanes or functional polyorganosiloxanes, in the presence of triflic acid and do not make reference to the use of any co-catalyst and in any case do not mention at all the use of an inert filler such as carbon black in combination with triflic acid.

CONCLUSION

In light of the foregoing, it is believed that this application is free of all record rejections and objections. Further, favorable action is believed to be in order and is earnestly solicited.

Respectfully submitted,

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